

Safety data sheet

Page: 1/12

BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2022

Version: 2.0

Product: **Imazethapyr Herbicide Technical**

(ID no. 30840187/SDS_CPA_00/EN)

Date of print 06.05.2024

1. Identification

Product identifier

Imazethapyr Herbicide Technical

Chemical name: 3-Pyridinecarboxylic acid, 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-ethyl-

CAS Number: 81335-77-5

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: crop protection product, herbicide

Details of the supplier of the safety data sheet

Company:

BASF SE

67056 Ludwigshafen

GERMANY

Operating Division Crop Protection

Telephone: +49 621 60-27777

E-mail address: Produktinformation-Pflanzenschutz@basf.com

Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

2. Hazards Identification

Classification of the substance or mixture

According to UN GHS criteria

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2022

Version: 2.0

Product: **Imazethapyr Herbicide Technical**

(ID no. 30840187/SDS_CPA_00/EN)

Date of print 06.05.2024

Aquatic Acute 1
Aquatic Chronic 1

M-factor acute: 10
M-factor chronic: 10

For the classifications not written out in full in this section the full text can be found in section 16.

Label elements

Globally Harmonized System (GHS)

Pictogram:



Signal Word:
Warning

Hazard Statement:

H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P273 Avoid release to the environment.

Precautionary Statements (Response):

P391 Collect spillage.

Precautionary Statements (Disposal):

P501 Dispose of contents and container to hazardous or special waste collection point.

Other hazards

According to UN GHS criteria

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

3. Composition/Information on Ingredients

Substances

Chemical nature

Product for the production of: crop protection product, herbicide

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2022

Version: 2.0

Product: **Imazethapyr Herbicide Technical**

(ID no. 30840187/SDS_CPA_00/EN)

Date of print 06.05.2024

Imazethapyr (Content (W/W): >= 94 %)
CAS Number: 81335-77-5

For the classifications not written out in full in this section the full text can be found in section 16.

Mixtures

Not applicable

4. First-Aid Measures

Description of first aid measures

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

On skin contact:

Wash thoroughly with soap and water

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Rinse mouth and then drink 200-300 ml of water.

Most important symptoms and effects, both acute and delayed

Symptoms: (Further) symptoms and / or effects are not known so far

Indication of any immediate medical attention and special treatment needed

Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
dry powder, foam, water spray

Unsuitable extinguishing media for safety reasons:

carbon dioxide

Special hazards arising from the substance or mixture

Carbon monoxide, Carbon dioxide, nitrogen oxides

The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Special protective equipment:

Wear self-contained breathing apparatus and chemical-protective clothing.

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2022

Version: 2.0

Product: **Imazethapyr Herbicide Technical**

(ID no. 30840187/SDS_CPA_00/EN)

Date of print 06.05.2024

Further information:

Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

Environmental precautions

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For small amounts: Contain with dust binding material and dispose of.

For large amounts: Sweep/shovel up.

Avoid raising dust. Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

7. Handling and Storage

Precautions for safe handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:

Avoid dust formation. Dust can form an explosive mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Further information on storage conditions: Protect against moisture. Keep away from heat. Protect from direct sunlight.

Storage stability:

Storage duration: 60 Months

Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

8. Exposure Controls/Personal Protection

Control parameters

Components with occupational exposure limits

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2022

Version: 2.0

Product: **Imazethapyr Herbicide Technical**

(ID no. 30840187/SDS_CPA_00/EN)

Date of print 06.05.2024

| No substance specific occupational exposure limits known.

Exposure controls

Personal protective equipment

Respiratory protection:

Respiratory protection not required.

Hand protection:

Suitable chemical resistant safety gloves (EN ISO 374-1) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Form:	solid, powder	
Colour:	off-white	
Odour:	pungent odour	
Odour threshold:	Not determined due to potential health hazard by inhalation.	
pH value:	approx. 2 - 3 (approx. 25 °C) (as a dispersion)	(other)
melting range:	176 - 177 °C	(OECD Guideline 102)
Boiling point:	The substance / product decomposes therefore not determined.	
Flash point:	not applicable, the product is a solid	
Evaporation rate:	not applicable	
Flammability:	not flammable	

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2022

Version: 2.0

Product: **Imazethapyr Herbicide Technical**

(ID no. 30840187/SDS_CPA_00/EN)

Date of print 06.05.2024

Lower explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.	
Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.	
Vapour pressure:	approx. 0,000011 mPa (approx. 25 °C)	(OECD Guideline 104)
Relative vapour density (air):	negligible	
Solubility in water:	1,4 g/l (approx. 25 °C, pH 7)	
Solubility (quantitative) solvent(s):	Acetone 48,2 g/l (approx. 25 °C)	
Solubility (quantitative) solvent(s):	Methanol 105 g/l (approx. 25 °C)	
Partitioning coefficient n-octanol/water (log Kow):	1,49 (25 °C; pH value: 7)	
Self ignition:	Temperature: > 200 °C No self ignition was observed up to the specified temperature.	Test type: Self-ignition at high temperatures. (Method: other)
Thermal decomposition:	210 °C, 40 kJ/kg (DSC (DIN 51007)) (onset temperature) 400 °C, 40 kJ/kg (onset temperature) Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.	
Viscosity, dynamic:	not applicable, the product is a solid	
Explosion hazard:	not explosive	
Fire promoting properties:	not fire-propagating	

Other information

Self heating ability: It is not a substance capable of spontaneous heating.

Minimum ignition energy: 3 - 10 mJ

Bulk density: 460 kg/m³
(20 °C)

pKA: Apparent density after tamping
3,9

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2022

Version: 2.0

Product: **Imazethapyr Herbicide Technical**

(ID no. 30840187/SDS_CPA_00/EN)

Date of print 06.05.2024

Surface tension:

Based on chemical structure, surface activity is not to be expected.

Molar mass:

289,33 g/mol

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

Conditions to avoid

See SDS section 7 - Handling and storage.

Incompatible materials

Substances to avoid:

strong oxidizing agents, aluminum compounds, strong bases, strong acids

Hazardous decomposition products

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Experimental/calculated data:

LD50 rat (oral): > 2.000 mg/kg (OECD Guideline 401)

No mortality was observed.

LC50 rat (by inhalation): > 4,9 mg/l 4 h (OECD Guideline 403)

No mortality was observed. An aerosol was tested.

LD50 rabbit (dermal): > 2.000 mg/kg (OECD Guideline 402)

No mortality was observed.

Irritation

Assessment of irritating effects:

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2022

Version: 2.0

Product: **Imazethapyr Herbicide Technical**

(ID no. 30840187/SDS_CPA_00/EN)

Date of print 06.05.2024

Not irritating to the skin. Not irritating to the eyes.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:

There is no evidence of a skin-sensitizing potential.

Experimental/calculated data:

Buehler test guinea pig: Non-sensitizing. (OECD Guideline 406)

Germ cell mutagenicity

Assessment of mutagenicity:

No mutagenic effect was found in various tests with microorganisms and mammalian cell culture.

Carcinogenicity

Assessment of carcinogenicity:

In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.

Reproductive toxicity

Assessment of reproduction toxicity:

The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

No substance-specific organotoxicity was observed after repeated administration to animals.

Aspiration hazard

No aspiration hazard expected.

Other relevant toxicity information

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2022

Version: 2.0

Product: **Imazethapyr Herbicide Technical**

(ID no. 30840187/SDS_CPA_00/EN)

Date of print 06.05.2024

Misuse can be harmful to health.

12. Ecological Information

Toxicity

Assessment of aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

Toxicity to fish:

LC50 (96 h) 240 mg/l, *Ictalurus punctatus*, syn: *I. robustus*

Aquatic invertebrates:

LC50 (96 h) > 109 mg/l, *Crassostrea virginica*

Aquatic plants:

EC50 (14 d) 0,0101 mg/l, *Lemna gibba*

No observed effect concentration 0,00438 mg/l, *Lemna gibba*

EC50 (96 h) 71 mg/l, *Selenastrum capricornutum*

No observed effect concentration (96 h) 50 mg/l, *Selenastrum capricornutum*

Persistence and degradability

Assessment biodegradation and elimination (H₂O):

Not readily biodegradable (by OECD criteria).

Elimination information:

approx. 1 - 2 % CO₂ formation relative to the theoretical value (28 d) (DIN ISO 11266) (soil)

Bioaccumulative potential

Assessment bioaccumulation potential:

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.

Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria.

Not fulfilling vPvB (very persistent/very bioaccumulative) criteria.

Other adverse effects

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2022

Version: 2.0

Product: **Imazethapyr Herbicide Technical**

(ID no. 30840187/SDS_CPA_00/EN)

Date of print 06.05.2024

The substance is not listed in the Montreal Protocol on substances that deplete the ozone layer.

Additional information

Other ecotoxicological advice:

Non-hazardous for bees. Do not discharge product into the environment without control.

13. Disposal Considerations

Waste treatment methods

Must be sent to a suitable incineration plant, observing local regulations.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

14. Transport Information

Land transport

ADR

UN number or ID number: UN3077

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(IMAZETHAPYR 90%)

Transport hazard class(es): 9, EHS

Packing group: III

Environmental hazards: yes

Special precautions for user: None known

RID

UN number or ID number: UN3077

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(IMAZETHAPYR 90%)

Transport hazard class(es): 9, EHS

Packing group: III

Environmental hazards: yes

Special precautions for user: None known

Inland waterway transport

ADN

UN number or ID number: UN3077

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2022

Version: 2.0

Product: **Imazethapyr Herbicide Technical**

(ID no. 30840187/SDS_CPA_00/EN)

Date of print 06.05.2024

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(IMAZETHAPYR 90%)

Transport hazard class(es): 9, EHSM
Packing group: III
Environmental hazards: yes
Special precautions for user: None known

Transport in inland waterway vessel

Not evaluated

Sea transport

IMDG

UN number or ID number: UN 3077
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(IMAZETHAPYR 90%)

Transport hazard class(es): 9, EHSM
Packing group: III
Environmental hazards: yes
Marine pollutant: YES
Special precautions for user: EmS: F-A; S-F

Air transport

IATA/ICAO

UN number or ID number: UN 3077
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(IMAZETHAPYR 90%)

Transport hazard class(es): 9, EHSM
Packing group: III
Environmental hazards: yes
Special precautions for user: None known

Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

Further information

Product may be shipped as non-hazardous in suitable packages containing a net quantity of 5 kg or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375; IMDG: 2:10.2.7; IATA: A197; TDS: Special Provision 99(2); 49CFR: §171.4 (c) (2) and also the Special Provision 375 in Appendix B which is regulated in China "Regulations Concerning Road

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2022

Version: 2.0

Product: **Imazethapyr Herbicide Technical**

(ID no. 30840187/SDS_CPA_00/EN)

Date of print 06.05.2024

Transportation of Dangerous Goods Part 3: Index of dangerous goods name and transportation requirements" (JT/T 617.3)

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

16. Other Information

Assessment of the hazard classes according to UN GHS criteria (most recent version)

M-factor acute: 10

M-factor chronic: 10

Full text of classifications, hazard symbols and hazard statements, if mentioned in section 2 or 3:

Aquatic Acute Hazardous to the aquatic environment - acute

Aquatic Chronic Hazardous to the aquatic environment - chronic

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Vertical lines in the left hand margin indicate an amendment from the previous version.